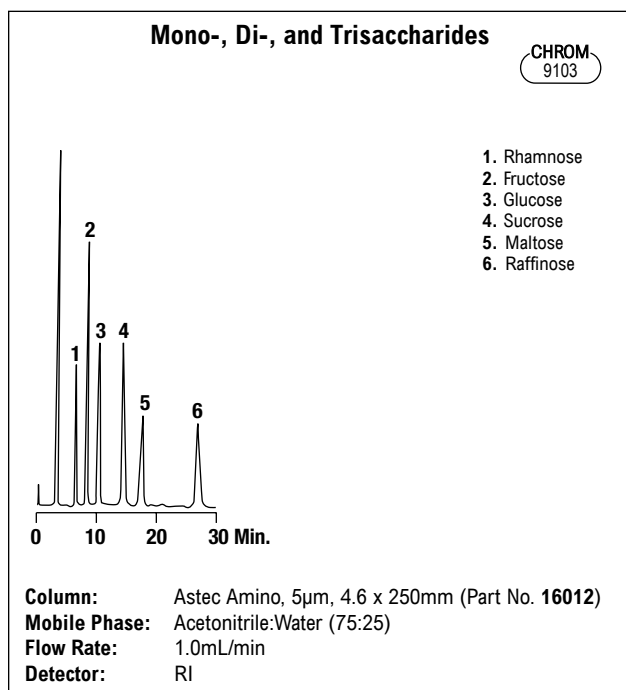


## Astec Amino and Reversed-Phase Columns

- Durable vinyl alcohol copolymer
- Stable from pH 2–13
- Stable and reproducible performance

Choose Astec amino columns for separating mono- and oligosaccharides. Astec's polymer base makes these columns much more stable than silica-based amino columns.

Choose Astec reversed-phase columns for amines and high recoveries of proteins and peptides. Because there are no silanols, elution order is always based on hydrophobicity of the analytes rather than polar interactions with the base material. High recovery of proteins and peptides is typical even at low sample loads.



### Astec Amino and Reversed-Phase 300Å Columns

Packing	Format	i.d. x Length	Part No.
C18, 5 $\mu$ m	Analytical	4.6 x 150mm	<b>16004</b>
	Analytical	4.6 x 250mm	<b>16005</b>
C8, 5 $\mu$ m	Analytical	4.6 x 150mm	<b>16006</b>
	Analytical	4.6 x 250mm	<b>16007</b>
C4, 5 $\mu$ m	Analytical	4.6 x 150mm	<b>16008</b>
Amino, 5 $\mu$ m	Analytical	4.6 x 250mm	<b>16012</b>

### Astec Amino and Reversed-Phase Guard Columns

Packing	i.d. x Length	Qty.	Part No.
C18, 5 $\mu$ m	4.6 x 10mm	ea	<b>28180</b>
C8, 5 $\mu$ m	4.6 x 10mm	ea	<b>28181</b>
Amino, 5 $\mu$ m	4.6 x 10mm	ea	<b>28187</b>

## Astec Cyclobond™ Columns

### For Chiral Separations

- Versatile chiral selectors
- High-purity 5 $\mu$ m spherical silica

Cyclodextrin Phases	
Designation	Substituent
<b>I 2000</b>	$\beta$ -Cyclodextrin
<b>I 2000 Ac</b>	$\beta$ -Cyclodextrin Acetylate
<b>I 2000 RSP</b>	$\beta$ -Cyclodextrin R,S-Hydroxypropyl Ether

**Cyclobond™ I 2000** has the broadest applicability, and is ideal for small analytes in pharmaceutical, chemical, and environmental applications.

**Cyclobond™ 1 2000 Ac** is ideal for aromatic alcohols or amines that are chiral on the alpha or beta carbon.

**Cyclobond™ I 2000 RSP** is a general-purpose chiral stationary phase. It can separate non-aromatic structures such as t-boc amino acids.

### Astec Cyclobond™ Columns

Packing	Format	i.d. x Length	Part No.
I 2000, 5 $\mu$ m	Analytical	4.6 x 100mm	<b>400101</b>
	Analytical	4.6 x 250mm	<b>410101</b>
I 2000 Ac, 5 $\mu$ m	Analytical	4.6 x 250mm	<b>410121</b>
I 2000 RSP, 5 $\mu$ m	Analytical	4.6 x 250mm	<b>411121</b>

### Astec Cyclobond™ Guard Cartridges\*

Packing	i.d. x Length	Qty.	Part No.
I 2000, 5 $\mu$ m	4.0 x 20mm	ea	<b>430102</b>
I 2000 RSP, 5 $\mu$ m	4.0 x 20mm	ea	<b>430105</b>
Astec Guard Cartridge Holder		ea	<b>11014</b>

\*Guard holder required.